

REMARKS

Claims 1, 6, 8, 13, 17, 18, 24 and 25 remain in this application. All other claims have been amended by eliminating multiple dependent claims and deleting preferably clauses. Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Version With Markings to Show Changes Made".

The support for these amendments is found in the claims as originally filed. These amendments are being entered to bring the claims into conformance with, *inter alia*, 37 CFR §1.75; no new matter is added.

Respectfully submitted,

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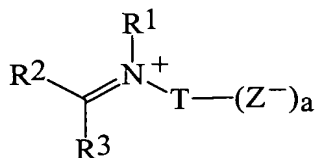
VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the claims:

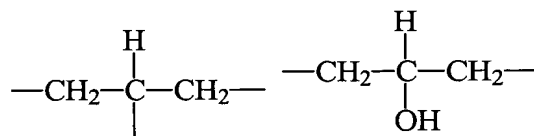
1. A detergent composition comprising a detergent ingredient, a pectate lyase enzyme and bleach system selected from the group consisting of a metal bleach catalyst; a combination of a peroxygen source and a bleach booster selected from the group consisting of zwitterionic imines, anionic imine polyions having a net negative charge of from -1 to -3, and/or mixtures thereof; a diacyl peroxide and/or mixtures thereof.
2. A detergent composition according to claim 1 wherein the metal bleach catalyst is selected from :
  - (a) the  $[Mn(Bcyclam)Cl_2]$  catalyst;
  - (b) the cobalt catalyst having the formula :  $Co[(NH_3)_nM_mB_bT_tQ_qP_p]Y_y$  wherein Cobalt is in the +3 oxidation from, n is an integer from 0 to 5[, preferably 4-5, more preferably 5]; M represents a monodentate ligand; m is an integer from 0-5[, preferably 1 or 2, more preferably 1]; B represents a bidentate ligand; b is an integer from 0-2; T represents a tridentate ligand; t is 0 or 1; Q is a tetradentate ligand; q is 0 or 1; P is an pentadentate ligand; p is 0 or 1 and  $n+m+2b+3t+4q+5p=6$ ; Y is one or more appropriately selected counteranions present in a number y, where y is an integer from 1-3[, preferably 2-3, more preferably 2] when Y is a -1 charged anion, to obtain a charge-balanced salt;
  - (c) the cobalt catalyst having the formula  $[Co(NH_3)_5M]T_y$  wherein cobalt is in the +3 oxidation state; M is a carboxylate-containing ligand having the formula  $RC(O)O^-$ ; and T is one or more counteranions present in a number y, where y is an integer to obtain a charge-balanced salt [(preferably from 1-3, more preferably 2 when T is a -1 charged anion)]; and/or mixtures thereof.
3. A detergent composition according to claim 2 [1-2] comprising said metal bleach catalyst and further comprising a peroxygen source[, preferably selected from the group consisting of a hydrogen peroxide source, a peroxyacid bleach precursor compound, and/or mixtures thereof].
4. A composition according to claim 3 [claims 2-3] wherein the metal bleach catalyst is present in an amount of from 1ppb to 10%[, preferably from 0.1ppm to 1%, more preferably from 1ppm to 0.1%] by weight of total composition.

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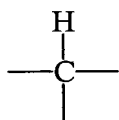
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5. A detergent composition according to claim 1 [any of the preceding claims] wherein said diacyl peroxide is selected from the group consisting of dibenzoyl peroxide, benzoyl glutaryl peroxide, benzoyl succinyl peroxide, di(2-methyl benzoyl) peroxide, and/or mixtures thereof.
  6. A detergent composition according to claim 5 wherein said diacyl peroxide is dibenzoyl peroxide.
  7. A detergent composition according to claim 1 [any of the preceding claims] wherein said diacyl peroxide is comprised in a particle; said particle comprising from 1-80% by weight of said particle of diacyl peroxide, from 0.01-95% by weight of said particle of a water soluble stabilising additive.
  8. A detergent composition according to claim 7 wherein said stabilising additive is selected from the group consisting of alkali metal sulfates and citrates, ethoxylated C16-20 alcohols, polyethylene glycols melting above 100°F, maltodextrins, polyacrylate polymers and copolymers of molecular weight between 1.000 and 80.000, ethylene diamine tetra-acetates, ethylene diamine disuccinates and/or mixtures thereof.
  9. A detergent composition according to claim 4 [claim 1-4] wherein said diacyl peroxide is dilauroyl peroxide.
  10. A detergent composition according to claim 1 [any of the preceding claims] wherein said diacyl peroxide is comprised at a level of from 0.01% to 20% by weight of the composition[, preferably 0.5% to 10%, more preferably 0.2% to 3%].
  11. A detergent composition according to claim 10 [claims 7-10] wherein the diacyl peroxide is incorporated into a particulate and said particle is comprised at a level of from 0.1% to 30%[, preferably from 1% to 15%, more preferably from 1.5% to 10%] of the total composition.
  12. A detergent composition according to claim 1 [any of the preceding claims] wherein said bleach booster is selected from the group consisting of aryliminium zwitterions, aryliminium polyions having a net negative charge of from -1 to -3; and/or mixtures thereof.
  13. A detergent composition according to claim 12 wherein said bleach booster has the formula:



wherein  $\text{R}^1$ - $\text{R}^3$  are moieties having a total charge of from about 0 to about -1;  $\text{R}^1$  and  $\text{R}^2$  form part of a common ring; T is selected from the group consisting of:  $-(\text{CH}_2)_b-$  wherein b is from about 1 to about 8,  $-(\text{CH}(\text{R}^5))-$  wherein  $\text{R}^5$  is  $\text{C}_1$ - $\text{C}_8$  alkyl,  $-\text{CH}_2(\text{C}_6\text{H}_4)-$ ,

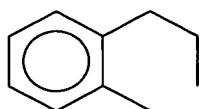


and  $-(\text{CH}_2)_d(\text{E})(\text{CH}_2)_f-$  wherein d is from 2 to 8, f is from 1 to 3 and E is  $-\text{C}(\text{O})\text{O}-$ ,  $-\text{C}(\text{O})\text{NR}^6$  or :

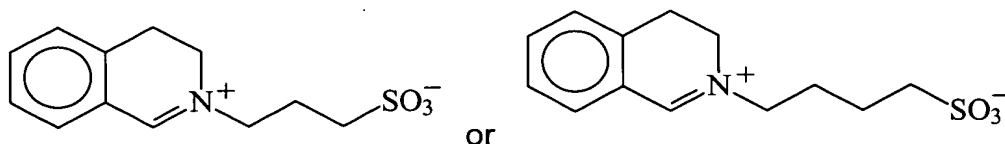


- wherein  $\text{R}^6$  is H or  $\text{C}_1$ - $\text{C}_4$  alkyl; Z is covalently bonded to T and Z is selected from the group consisting of  $-\text{CO}_2^-$ ,  $-\text{SO}_3^-$  and  $-\text{OSO}_3^-$  and a is either 1 or 2.

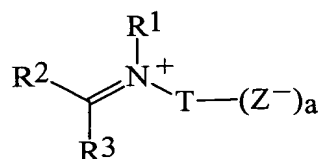
14. A detergent composition according to claim 13 [claims 12-13] wherein  $\text{R}^1$  and  $\text{R}^2$  together form the non-charged moiety:



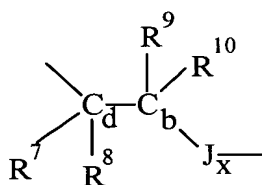
15. A detergent composition according to claim 14 [claims 12-14] wherein said bleach booster is an aryliminium zwitterion and  $\text{R}^3$  is H, T is  $-(\text{CH}_2)_b-$  or  $-\text{CH}_2(\text{C}_6\text{H}_4)-$ , Z is  $-\text{SO}_3^-$ , a is 1 and b is from 2 to 4.
16. A detergent composition according to claim 15 [claims 12-15] wherein said bleach booster is an aryliminium zwitterion having the formula:



17. A detergent composition according to claim 12 wherein said bleach booster bleach booster has the following formula:

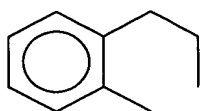


wherein  $\text{R}^1 - \text{R}^3$  is hydrogen or an unsubstituted or substituted radical selected from the group consisting of phenyl, aryl, heterocyclic ring, alkyl and cycloalkyl radicals;  $\text{R}^1$  and  $\text{R}^2$  form part of a common ring; T has the formula:



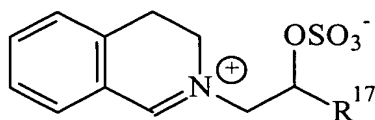
wherein  $x$  is equal to 0 or 1; J, when present, is selected from the group consisting of  $-\text{CR}^{11}\text{R}^{12}-$ ,  $-\text{CR}^{11}\text{R}^{12}\text{CR}^{13}\text{R}^{14}-$ , and  $-\text{CR}^{11}\text{R}^{12}\text{CR}^{13}\text{R}^{14}\text{CR}^{15}\text{R}^{16}-$ ;  $\text{R}^7 - \text{R}^{16}$  are selected from the group consisting of H, linear or branched  $\text{C}_1 - \text{C}_{18}$  substituted or unsubstituted alkyl, alkylene, oxyalkylene, aryl, substituted aryl, substituted arylcarbonyl groups, and amide groups; provided that at least one of  $\text{R}^7 - \text{R}^8$  must be H or methyl, and that when neither  $\text{R}^9$  nor  $\text{R}^{10}$  is H, one of  $\text{R}^7 - \text{R}^8$  must be H; Z is covalently bonded to  $\text{J}_x$  when  $x$  is 1 and to  $\text{C}_b$  when  $x$  is 0; and Z is selected from the group consisting of  $-\text{CO}_2^-$ ,  $-\text{SO}_3^-$  and  $-\text{OSO}_3^-$ , and  $a$  is 1.

18. A detergent composition according to claim 17 wherein said bleach booster wherein  $\text{R}^1$  and  $\text{R}^2$  are defined in its formula as  $\text{R}_1$  and  $\text{R}_2$  together form the non-charged moiety:



19. A detergent composition according to claim 18 [claims 17-18] wherein said bleach booster is an aryliminium zwitterion and  $\text{R}^3$  is H, Z is  $-\text{OSO}_3^-$ ,  $a$  is 1.

20. A detergent composition according to claim 19 [claims 17-19] wherein said bleach booster is an aryliminium zwitterion having the formula:



- where R<sup>17</sup> is selected from the group consisting of H and linear or branched C<sub>1</sub>-C<sub>18</sub> substituted or unsubstituted alkyl.
21. A detergent composition according to claim 1 [any of the preceding claims] wherein said bleach booster is comprised at a level of from 0.01% to 10% by weight of the total composition.
22. A detergent composition according to claim 21 [claims 12-21] wherein said peroxygen source is comprised at a level of from 0.01% to 60% by weight of the total composition.
23. A detergent composition according to claim 22 [claims 12-22] wherein said peroxygen source comprises a preformed peracid compound selected from the group consisting of percarboxylic acids and salts, percarbonic acids and salts, perimidic acids and salts, peroxymonosulfuric acids and salts, and/or mixtures thereof; a hydrogen peroxide source, a bleach activator and/or mixtures thereof.
24. A detergent composition according to claim 23 wherein said hydrogen peroxide source is selected from the group consisting of perborate compounds, percarbonate compounds, perphosphate compounds and/or mixtures thereof.
25. A detergent composition according to claim 23 wherein said bleach activator is selected from the group consisting of tetraacetythylenediamine, sodium decanoyloxybenzene sulfonate, sodium nonanoyloxybenzene sulfonate, sodium octanoyloxybenzene sulfonate, (6-octanamido-caproyl)oxybenzenesulfonate, (6-nonanamido-caproyl)oxybenzenesulfonate, (6-decanamido-caproyl)oxybenzenesulfonate, and/or mixtures thereof.
26. A detergent composition according to claim 1 [any of the preceding claims] wherein said pectate lyase is present at a level of from 0.0001% to 2%[, preferably from 0.0005% to 1.0, more preferably from 0.001% to 0.5%] pure enzyme by weight of total composition.

27. A detergent composition according to claim 1 [any of the preceding claims] further comprising a pectin lyase.
28. Use of a composition according to claim 1 [any of the preceding claims] for the removal of plant-, dirt-based stains, highly coloured food soils/stains and body soils.
29. Use of a composition according to claim 1 [any of the preceding claims] for superior fabric whiteness maintenance.
30. Use of a composition according to claim 11 [claims 5-11] for effective highly coloured stains and soils removal on plasticware, and/or for preventing the staining and/or discolouration of the dishware by highly coloured components.